

ELECTRICITY REGULATION IN MICHIGAN – A HISTORY

I. Background and Basic Principles

A. Introduction and Purpose

- Understanding Electricity Regulation Under 2016 PA 341-2
- Requires Review of Statutory History
- Industry Development – Legislative Response
- Accompanying materials: slides, outline, glossary, references

B. Industry Participants Today (and Yesterday)

- Investor-owned utilities (IOUs)
- Municipal electric utilities
- Rural electric cooperatives
- Applicable economic and service regulation (MPSC, local government, customer-elected board)
- RTOs, Transmission Providers, PURPA QFs, NUGs and Power Marketers

C. Federal vs State Regulation Boundary

- US Constitution – Art I, Sec 8: power of Congress to regulate commerce among the several states (“commerce clause”)
- US Constitution – Art VI: US law is the supreme law of the land (“supremacy clause”)
- Dormant commerce clause: even where Congress has not acted, regulation imposing a direct burden on interstate commerce is beyond the power of a state
- Electricity: federal regulation of wholesale and interstate transactions; state regulation of retail rates for service and matters primarily of state concern

D. Traditional Regulatory Principles

- Just, reasonable and non-discriminatory rates
- Regulatory compact and duty to serve
- Role of Constitutional takings clause – balancing opportunity for return against protecting public from monopoly abuse
- Natural monopoly theory
- Traditional use of cost of service ratemaking (70+ years)
- $R = O + (V - D)r$ (revenue requirement = operating expenses + return on undepreciated rate base)

E. Early Electric Industry Development and Start of Regulation

1. Founding Fathers of the Electric Industry

- **Thomas Alva Edison:** incandescent light bulbs in series; Pearl Street NY DC steam generators 6x1200 lamps; systems licensed – e.g. Detroit Edison
- **Nikola Tesla:** worked for Edison; developed polyphase AC electric generator
- **George Westinghouse:** first AC grid in MA and AC grid systems; Niagara Falls to Buffalo transmission, use of transformers to change voltage
- **Sam Insull:** also started with Edison; pioneered dominant model of vertical integration, economies of scale, demand and time metering, 2 part rate, promoting growth and demand diversity; holding company empire collapsed in Depression
- Insull: "If your entire plant is only in use 5.5 percent of the time, it is only a question of when you will be in the hands of a receiver."

2. Development and Growth (1880s – early 1900s)

- Competing types of local systems (AC, DC) often with municipal ownership
- Gretchen Bakke, *The Grid*, p57: "The electricity business might have been a chaotic diversity of competing interests and alternate systems in the final decades of the nineteenth century..."
- Battle of the Currents resolved in favor of 60 Hz, polyphase AC systems
- Technology: steam reciprocating generators, rotary and phase converters, transformers for AC transmission, polyphase system
- Public and business district lighting at first, competing with candles and gas; then trolleys (many small generators with special purposes)

3. The Beginnings of Regulation

- 1897-1907 primarily municipal regulation through competitive franchises and rate agreements; systems begin to expand beyond municipal limits
- Progressive concerns over natural monopolies (recent railroad experience) and municipal issues
- State commission regulation starts in 1907: NY, Wisconsin, Georgia; 33 states by 1914 (rates, service, service areas, accounting and financial)
- 2500 municipal electric utilities by 1922 (but declined from there)
- State PUC regulation provides financial stability to assure low cost, long term financing of capital additions

F. Michigan Electric Regulation Begins – Early 1900s

- Railroad Act, 1909 PA 300; MCL 462.2 – 462.50
- Utility Securities Act, 1909 PA 144; MCL 460.301 – 460.303 (repealed by 1995 PA 246)
- Electric Transmission Through Highways, 1909 PA 106; MCL 460.552 – 460.559

1. Regulation in 1909

- 3-member Railroad Commission (MRC): 2 same party – Governor appoints – 6 year terms – qualifications required (experience, 1 attorney)
- Included common carrier duty to serve; prohibits discriminatory rates
- Act 106 same year brought electricity under MRC control
- Act 144 same year required prior approval of public utility issuances of stocks, bonds, evidence of indebtedness

2. Act 106 Electricity Regulation

- Governs MPSC regulation of electricity generated in one county and delivered in the same or another county
- Requires prior approval of electric rates, MCL 460.552
- Preserves local control via franchises and consent to use ROW (Michigan constitutions protected local control)
- Authorizes fixing of rates on complaint; incorporates just and reasonable standard; prohibits discrimination among similarly situated customers; authorizes rulemaking, and court appeals pursuant to Act 300
- Names elements to consider in setting price (cost, return, depreciation, obsolescence, business risk, connected load, value of service, hours and quantity), MCL 460.557(2)

3. 1909 – What's Left Today?

- Act 144 on securities repealed in 1995 (redundancy with federal and state securities regulation)
- Sections 2–50 of Act 300 remain on books
- MPSC – 30-day appeal right still governed by Act 300, Section 26 (as amended); MCL 462.26; circuit courts until changed to appeals court in 1987
- Sections 1-9 of Act 106 remain

4. Public Utilities Commission Act, 1919 PA 419; MCL 460.51 – 460.52

- Abolished railroad commission and replaced with MPUC

- 5 members; Gov appoints; 4 year terms (**other qualifications gone**)
- Control, regulation and fixing rates of all public utilities in Michigan (gas added)
- Sections 5-8 continue in effect regarding MPSC ability to require utility reports, utility books and records and investigating complaints, MCL 460.55 – 460.58
- Legislature transferred previous statutory powers to the new body
- Continuation of the development of state regulatory commissions to regulate the rapidly growing energy industries (steam, gas, lighting, heating)

5. Interest on Guaranty Deposits, 1921 PA 347; MCL 460.651 – 460.652: still in effect; authorizes a regulated public utility to require a deposit from ratepayers under terms and conditions approved by the MPSC

6. Rehearings, 1923 PA 94; MCL 460.351 – 460.352: authorized MPUC to grant rehearings and amend orders; remains in effect

7. Electric and Gas Corporations, 1923 PA 238; MCL 486.251 – 486.255

- Authority to form corporations to sell electricity and gas to the public or to utilities
- Includes **authority to condemn land for electric and gas lines** and facilities
- Authority goes to corporations organized under this act or otherwise for public utility purposes
- Amended by 2004 PA 197 to extend its condemnation authority to independent and affiliated transmission companies defined in 1995 PA 30 (transmission certification act)

8. Certificate of Convenience and Necessity for New Gas or Electric Projects, 1929 PA 69; MCL 460.501 – 460.506

- Primary statute protecting IOU and cooperative service territory boundaries; remains in effect today
- Municipals have franchise and ROW local control powers to protect their electric utility service territories
- Act requires prior MPSC certification (CCN) to render service in a municipality where another public utility is already rendering service; MPSC must consider existing service, investment and public benefit

G. Rapid Industry Growth and the Great Depression

- Continuing growth and consolidation, urban areas at first
- Federal regulation and power production begins

- Public Utility Holding Company Act of 1935 (SEC – limits them)
- Federal Power Act of 1935 expands Federal Power Commission regulation from hydroelectric to wholesale electricity transactions (now FERC)
- Rural Electrification Act of 1936 to facilitate extension of electricity in rural areas (cooperatives)
- Federal Electricity Generation Projects (work and development, WPA): Tennessee Valley, Bonneville, Hoover Dam and more – public power 12% of total generation by 1941
- Wendell Willkie (IOU president): “The Tennessee River touches seven states and drains the nation.”

H. Michigan - Public Service Commission Act, 1939 PA 3; MCL 460.1 – 460.11

- This remains **the primary statute governing MPSC regulation of public utilities!**
- Abolished and replaced Public Utilities Commission – back to 3 members and 6 year terms
- Recitals (since removed) that PUC failed in its duties of regulation
- Includes provisions regarding the MPSC, regulatory process, conducting rate cases, power supply and gas cost adjustment cases, consumer representation, and more
- Major legislative changes in subsequent acts up to today are part of Act 3, including 1982 PA 304, 2000 PA 141-142 and 2016 PA 341-342

I. The Golden Decades – to 1970

- Uninterrupted prosperity for the industry
- Demand grows and prices fall
- Atoms for Peace – introduction of nuclear power
- Atomic Energy Act – 1954; Price-Anderson Act

1. Increasing Efficiency and Falling Prices (EIA data)

- Pearl Street (1882): 24¢/kWh and 138,000 Btu/kWh
- 1900: residential 17¢/kWh; 92,000 Btu/kWh
- 1932: residential 5.6¢/kWh; 20,700 Btu/kWh
- 1945-50: prices drop 3%/year
- 1950s: prices drop 1%/year
- 1960s: prices drop 1.5%/year; 10,500 Btu/kWh

2. Continuous Growth

- 1901-1932: 12% annual growth (capacity and production)
- 1932-1941: 8% production and 2.5% capacity/year
- 1945-1960: demand growth above 8%/year
- 1960s: 7.5% annual growth (capacity and production)
- Electrification grew from 8% of dwellings in 1907 to 67% by 1932 (forms to 50% by 1945)

J. 1960s – Clouds on the Horizon

- Continued improvements in technology and growth
- Heat rate (efficiency) improvements slowed
- Reliability became a concern
- Growth of environmental regulation increased (National Environmental Policy Act of 1969)
- Public demands for open government and due process

1. Northeast Blackout – November 9, 1965

- 30 million customers out; 26,000 MW lost
- Cascade started with transmission lines feeding Toronto - led to creation of North American Reliability Council (NERC) and regional reliability councils

2. Administrative Procedures Act, 1969 PA 306; MCL 24.201 – 24.328 (MAPA)

- Federal APA of 1946
- MAPA replaced and modernized earlier acts governing rulemaking (1943 PA 88)
- MAPA governs agency guidelines, formal rulemaking (JCAR), emergency rules, procedures in contested cases, licensing process and judicial review
- Duly promulgated rules have force and effect of laws (exercise of legislative power)
- Protections: notice, hearing, ORR, JCAR (rules must be within scope of statutory powers)

3. Open Government (1970s): Freedom of Information Act, 1976 PA 442; MCL 462.26 and Open Meetings Act, 1976 PA 267 *et seq.*; MCL 15.263 *et seq.*

- FOIA is a disclosure statute for public records (limited discretionary exceptions)
- MPSC protective orders
- All public body deliberations in open meeting (amended to allow MPSC case deliberations as exception)

K. Increasing Costs and Energy Crisis (1970 – 1980s):

- Marginal costs begin to exceed average costs: inflation, labor costs, fuel costs, environmental concerns and public opposition to projects
- Arab Oil Embargo 1973 (Yom Kippur War)
- Oil Crisis of 1978 – 1980 (Iran Hostages)
- Three Mile Island 1979
- Fears of resource scarcity and “peak oil”
- Amory Lovins “soft path” article October 1976 Foreign Affairs – megawatts and conservation

1. Congress Responds to Energy and Environmental Issues

- Natural Energy Act 1978 created DOE, National Renewable Energy Lab
- Public Utility Regulatory Policies Act 1978 (PURPA): Section 210 requires utility purchase of alternative energy at avoided cost (“must buy” up to 80 MW – later reduced to 20 MW) – cogeneration and small power production
- Natural Gas Policy Act

2. Costs of Regulating Public Utilities, 1972 PA 299; MCL 460.111 – 460.120

- Provides for annual assessment collected through public utility rates to be utilized solely to finance the costs of regulatory public utilities; mostly apportioned among utilities on a gross revenue basis but some are adjusted based on circumstances
- Sets procedures for challenging assessments
- Funding goes to LARA and is distributed via appropriations among MPSC, MAE, Attorney General and Administrative Law Judges
- 2017: about \$34 million (\$27.7 million MPSC/MAE; \$4.08 million LARA; \$2.077 million Attorney General)

3. Emergency Energy Act, 1974 PA 1; MCL 460.151 – 460.184

- Response to energy crisis from Arab oil embargo
- Expired by its terms in 1974

4. Utility Adjustment Clauses, 1982 PA 304; MCL 460.6h – 460.6m (Part of Act 3)

- Banned automatic rate adjustment clauses that operated without notice and hearing
- Established a framework for adjustments to utility rates to reflect changes in the costs of gas and power supply (GCR and PSCR), with notice and hearing
- Established the utility consumer participation board and fund to assure ratepayer representation in the GCR and PSCR cases (extended to other cases in 2016)
- Major controversy at the time, with competing ballot proposals, resolved by the Supreme Court in Re Proposals D and H, 417 Mich 409 (1983)

2. Michigan Low Income Heating Assistance and Shutoff Protection Act, 1984 PA 34; MCL 400.1201 – 400.1217

- Part of a package of legislation dealing with low income energy assistance
- Created an assistance program that was implemented by utilities for the period through 9-30-88 (updated Michigan Energy Assistance Program today)

3. Public Assistance Home Repair, Weatherization and Shutoff Protection Act, 1984 PA 35; MCL 400.1151 – 400.1165

- Required measures such as a home energy analysis and provides for home repair and weatherization
- MPSC rules and other statutes also address shutoff protection

L. Electric Industry – Transformation (1980 – 2008)

- Series of Federal Energy Policy Acts:
 - EAct 1992 – PUHCA exemption for wholesale IPPs; open up transmission
 - EAct 2005 – biofuels, efficiency, renewable generation
 - EAct 2006 – transmission corridors; electric reliability, net metering, time based rates, repeal PUHCA
 - EISA 2007 – fuel economy, biofuels, efficiency for appliances and buildings

- FERC implementation orders 888-9: open access transmission, unbundling, stranded costs
- Wholesale Competition
- Unbundling and Independent System Operators (ISOs)
- Electric Retail Wheeling and Retail Choice

1. Electric Transmission Line Certification Act, 1995 PA 30; MCL 460.561 – 460.575

- Utility, affiliated transmission company, independent transmission company must obtain an MPSC certificate of public convenience and necessity (CPCN) for major transmission lines (> 345kV and 5 miles)
- Requires public meetings and specified MPSC procedures
- Allows optional CPCN application for non-major transmission lines
- CPCN prevails over conflicting local ordinances and is binding for eminent domain proceedings MCL 460.570

M. Electric Retail Choice and Alternative Energy

- 45 PURPA QF contracts for MCV and small projects: cogeneration, biomass, hydro, municipal waste and landfill gas
- Avoided cost set on basis of proxy coal unit in early 1980s (now under review – MPSC)
- Move to experimental retail wheeling ended with Consumers Power v MPSC, 460 Mich 148 (1999)
- National trend towards “retail choice” aka “retail open access” in 1990s – restructuring to allow customers to choose generation supplier
- 2000-01 California energy crisis stopped the movement at 14 deregulated states (e.g. TX, OH, IL, PA); Michigan “hybrid” model and California model

1. Customer Choice and Electric Reliability Act (CCERA), 2000 PA 141-142; MCL 460.10 – 460.10cc

- Major change in Michigan law corresponding to the 1990s national movement towards deregulation or “electric restructuring”
- Required electric IOUs to implement full retail choice by 1-1-02 (municipal utilities retained control over decision; cooperatives given more flexibility)
- 5% reduction in residential rates for CE and DTE and all rates frozen until 12-31-03; residential freeze to 1-1-06
- Allowed full recovery of stranded and implementation costs

- Allowed securitization financing by utilities with part of the savings used to fund the 5% rate reduction and a low-income and energy efficiency fund
- Required unbundling of rates into components of power supply, transmission and distribution services (G, T and D)
- MPSC licensing of alternative energy providers
- Require IOUs to join a multi-state transmission system or divest their interest in transmission (control by MISO, PJM; ownership by ITC and ATC)
- Require 2,000 MW expansion plan for transmission import capability
- Merchant plant connection to T&D systems
- Market power review and potential mitigation
- Others: employee protection, environmental disclosures, customer choice education, code of conduct, shutoff protection, quality of service

N. Michigan Experience – Post Acts 141-2

- No significant retail choice for residential customers
- By 2008 AES sales at 4% for DTE and Consumers Energy (none for others); 3 years of decline
- Integrated Resource Planning (collaboratives)
 - Capacity Need Forum 1-3-06
 - 21st Century Energy Plan 1-31-07 (lower peninsula baseload proposals – Wolverine and Consumers Energy)
 - Part of August, 2003 Electricity Blackout

1. Electric Cooperative Member Regulation Act, 2008 PA 167; MCL 460.31 – 460.39

- MPSC regulated electric cooperative rates, practices and services prior to this act
- Act allows board of directors (elected by customers) to elect member regulation for rates, accounting, billing and service (MPSC remains for safety, interconnection, retail choice....)
- All co-ops have elected member-regulation

2. 2008 PA 286, Act 3 and CCERA Amendments – Ratemaking changes throughout MCL 460.6 – 460.11

- Revised electric and gas rate case procedures
- Increase time for MPSC rate case processing from 9 to 12 months, while adding the concept of “deemed approval” after 12 months and the ability of utilities to “self-implement” rate increases 6 months after filing the request

- MPSC to adopt standard rate case filing forms and procedures
- New MPSC authority over utility mergers and asset transfers, MCL 460.6q
- New MPSC authority for certificates of necessity for large electric supply investment, including integrated resource planning, MCL 460.6s
- Additional fuel cost recovery for biomass (wood) merchant plants
- Require “de-skewing” of electric rates over time to reflect cost of service for each rate class, MCL 460.11
- Amended CCERA to “cap” retail choice at 10% of a utility’s retail sales
- New provisions for administering retail choice programs in view of the 10% limit (allocation, return to service, exceptions for facility expansion)
- Full choice cap exemption for U.P. iron ore mining and processing facility

3. Clean, Renewable and Efficient Energy Act (CREEA), 2008 PA 295; MCL 460.1001 – 460.1211

- First renewable energy (RE) requirement in Michigan law: IOUs and co-ops (not municipals) must have 10% of energy supply from renewables by 2015 with interim steps; largest utilities must meet a capacity portfolio of 500 MW (CE) and 600 MW (DTE)
- Territorial limit on source of renewable energy (MI + nearby areas)
- Provisions on cost recovery, approval of RE plans, use and tracking of RE credits (RECs), incentive RECs for in-state equipment and workforce, reporting and civil enforcement for member-regulated co-operatives
- First energy optimization (EO) requirement in Michigan law: IOUs, co-ops and municipal providers must file plans to meet savings targets of 1% of electric sales and 0.75% of gas sales by 2015, with interim steps
- Provisions for cost recovery, option to use a state administrator, large customer self-directed plans, authorized incentives and MPSC oversight and reporting
- Provisions for the state to reduce grid-based energy purchases 25% by 2015 and implement conservation and efficiency programs for state buildings
- Set up wind energy advisory board to establish geographic zones that are favorable to wind energy development
- Authorize expedited transmission siting certification by MPSC for wind projects
- Require MPSC to establish a statewide net metering program applicable to all rate-regulated electric utilities and AESs, with provisions for interconnection, applications, metering and enforcement, MCL 460.1171 – 460.1185

[TO BE CONTINUED]

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